

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gow

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/072,959	05/05/1998	PAI HUNG PAN	2919.1US	7136	
75	590 04/09/2002				
JOSEPH A WALKOWSKI			EXAMINER		
TRASK BRITT P O BOX 2550			FOURSON III, GEORGE R		
SALT LAKE CITY, UT 84110			ART UNIT	PAPER NUMBER	
			2823		
			DATE MAILED: 04/09/2002	DATE MAILED: 04/09/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

A			QL			
		Application No.	Applicant(s)			
Office Action Summary		09/072,959	PAN			
		Examiner	Art Unit			
		George Fourson	2823			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1)⊠	Responsive to communication(s) filed on 16 J	<u>lanuary 2002</u> .				
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ Thi	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
•	on of Claims					
<i>,</i> —	Claim(s) <u>1-5,11-17,25-28 and 33-38</u> is/are per					
	4a) Of the above claim(s) is/are withdray	vn from consideration.				
·	5) Claim(s) is/are allowed.					
•	Claim(s) <u>1-5,11-17,25-28 and 33-38</u> is/are reje	cted.				
•	Claim(s) is/are objected to.	1				
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers  9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority u	nder 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice 2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			

Art Unit 2823

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/01 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsai et al.

Tsai et al is applied as stated in the office action mailed 10/11/01.

Claims 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al as applied to claims 1-4 and 25-27 above, and further in view of the following comment.

Tsai et al does not disclose densification of the trench fill material by annealing. The examiner takes official notice that densification of trench fill material by annealing was known prior to applicant's invention. It would have been within the scope of one of ordinary skill in the art to combine the known process with that of Tsai et al to enable formation of a trench isolation structure.

Claims 11-17 and 33-38 are allowed.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956. See MPEP 203.08.

Application/Control Number: 09/072,959

Art Unit: 2823

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner George Fourson whose telephone number is (703) 308-2544. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (703) 308-4918. The fax number for this group is (703)308-7722(7724,3431 and 3432). MPEP 502.01 contains instructions regarding procedures used in submitting responses by facsimile transmission.

Primary Examiner
Art Unit 2823

GFourson April 8, 2002